

ABSTRACT OF THE DISCLOSURE

A dicing tape is adhered to the lower surface of a silicon wafer that has pillar-shaped electrodes. The silicon wafer is cut along dicing streets, thereby making trenches among the chip-forming regions of the wafer. Next, a seal film is formed. The seal film is cut, substantially along the centerlines of the trenches. A support tape is adhered to the upper surface of the seal film. The dicing tape is peeled off. Then, those parts of the seal film that project from the lower surface of the silicon wafer are polished and removed. The support tape is peeled off. IC chips are thereby obtained. In each IC chip, the seal film covers and protects the upper surface and sides of the semiconductor substrate.